WHAT IS CLAIMED IS:

1. A method of recording a compression encoding table in a pseudo read-only memory, the data values of the compression encoding table are repeating or increasing, the method comprising:

dividing the compression encoding table into a plurality of blocks, each of which has either the repeating or increasing data values of the compression encoding table; and

calculating the repeating or increasing data values of each of the blocks by using a logic circuit.

2. The method according to claim 1, further comprising:

storing non-repeating or non-increasing data values of the compression encoding table in a storage element.

3. The method according to claim 2, wherein the storage element is a read-only memory.

4. The method according to claim 1, wherein each of the blocks with the repeating data values is denoted by a repeat symbol <REP, $LEVEL_{REP}$, $COUNT_{REP}$> where the REP denotes the repeating feature of the repeat symbol, the $LEVEL_{REP}$ denotes the repeating data values of the block, and the $COUNT_{REP}$ denotes a data count of the block.

5. The method according to claim 4, wherein each of the blocks with the increasing data values is denoted by an increase symbol <INC, $LEVEL_{INC}$, $COUNT_{INC}$> where the INC denotes the increasing feature of the increase symbol, the $LEVEL_{INC}$ denotes the initial value for the increasing data value of the block, and the $COUNT_{INC}$ denotes the data count of the block.

6. The method according to claim 5, wherein the step of calculating the repeating or increasing data values of each of the blocks by using a logic circuit includes:

obtaining the repeating data values, which are equal to the values of the $LEVEL_{REP}$ of the repeat symbol;

obtaining the increasing data values by the following equation:

$$VALUE_{INC} = INDEX - SUM_{COUNT} + LEVEL$$

where the $VALUE_{INC}$ denotes the increasing values, the INDEX denotes the index set for each datum by the compression encoding table, one by one starting from an initial index of 0, the SUM_{COUNT} denotes a data count of all the blocks that precede the located block, and the LEVEL denotes the value of $LEVEL_{INC}$ of the increase symbol.

7. An apparatus of recording a compression encoding table in a pseudo read-only memory, the compression encoding table setting an index for each datum, one by one starting from an initial index of 0, the data values of the compression encoding table being repeating or increasing, the compression encoding table being divided into a plurality of blocks according to the repeating or increasing data values, each of the blocks being denoted by a property symbol <OP, LEVEL, COUNT> wherein the OP denotes repeating or increasing, the LEVEL denotes initial values of the blocks, the COUNT denotes data counts of the blocks; the apparatus comprising:

a pseudo address decoder for determining the block, to which the index corresponds, by the index and generating a plurality of output values;

a programmable logic array for calculating and outputting, on the basis of the output values of the pseudo address decoder, an initial value of the property symbol of the block in which the index is located, and a data count of all the blocks that precedes the block; and

a corresponding value calculation module for calculating the values of the compression encoding table corresponding to the index on the basis of the output values of the

programmable logic array.

8. The apparatus according to claim 7, further comprising:

a storage element for storing non-repeating or non-increasing data of the compression encoding table, and

a first multiplexer for selectively outputting the output values calculated by the corresponding value calculation module or the data read from the storage element.

9. The apparatus according to claim 8, wherein the storage element is a read-only memory.

10. The apparatus according to claim 8, wherein if the block in which the index is located is not calculated by the programmable logic array, then the first multiplexer outputs the data read from the storage element, otherwise the programmable logic array outputs the output values calculated by the corresponding value calculation module.

11. The apparatus according to claim 7, wherein the pseudo address decoder includes:

at least one comparator with terminals A and B, the terminal A receiving a block bound value, which is a maximum index of the block, and the terminal B receiving the index, wherein if the input to the terminal B is greater than the input to the terminal A, then the at least one comparator outputs 1, otherwise the at least one comparator outputs 0, thereby determining the block in which the index is located;

at least one inverter for inverting one of the output values of the comparator; and

at least one AND gate with one input terminal receiving the output of one of two adjacent comparators of the at least one comparator and another input terminal receiving the inverted output of another of the two adjacent comparator.

12. The apparatus according to claim 7, wherein the corresponding value calculation module includes:

a first subtracter for outputting a first difference between the index and the data count;

an adder for summing the first difference and the initial value of the located block and outputting a increasing value; and

a second multiplexer for selectively outputting the symbol initial value output by the programmable logic array or output the increasing value output by the adder.

13. The apparatus according to claim 12, wherein if the symbol output by the programmable logic array is a repeat symbol, then the second multiplexer outputs the symbol initial value output by the programmable logic array, and if the symbol output by the programmable logic array is an increase symbol, then the second multiplexer outputs the increasing value output by the adder.

14. The apparatus according to claim 7, further comprising:

a second subtracter for outputting a second difference between the index and an address offset, wherein the data of the compression encoding table stored in the storage element is read on the basis of the second difference.